

II. Summary of ADP Research

Legal Review

At the outset of the project, ADP commissioned a legal review that describes how states can minimize their legal risks as they seek to raise standards and implement rewards for achieving higher standards.¹ Following is the summary of their recommendations:

1. Identify key college and employment standards.
2. Conduct a “gap analysis” between current high school standards and identified college and employment standards, and align state standards and assessments to the extent appropriate.
3. Develop a plan for ensuring that state curriculum and instruction, as well as educational interventions, are aligned with the new state standards.
4. Develop a plan for assessing student knowledge of new state standards and ensuring the validity of assessments.
5. Conduct a predictive validity study to answer the primary question of whether higher performance on a state assessment correlates with greater success in the given college program or, in the employment context, whether it correlates with greater success in the workplace.
6. Develop a plan to phase in the appropriate use of high school assessment data in college admissions and hiring decisions.

Subsequent research was designed with these recommendations in mind.

Defining Workplace Expectations

Consistent with the first recommendation in the legal research, the ADP workplace study is an analysis of the relationship between education, employment and earnings data, as well as employers’ reflections on what they believe are the critical English language arts and mathematics competencies for success in high-performance workplaces.

Highly-paid professional jobs together with well-paid skilled jobs now account for about 62 percent of all jobs (full- and part-time) in the economy and that share is expected to rise, while factory jobs and natural resource jobs are expected to continue to decline. (Since 1950, the proportion of American jobs classified as unskilled dropped from 80 percent to around 20 percent and the proportion is expected to drop still further – to 12 percent -- by 2006.) Moreover, the factory jobs and natural resource jobs that remain are becoming relatively more skilled.

Using Bureau of Labor projections, Educational Testing Service (ETS) identified the occupations that are likely to have the greatest trajectories of growth over the next ten years. ETS identified three categories of jobs (“highly-paid professional,” “well-paid/skilled,” and “low-paid/low-skilled”). Factors such as entry-level salary,

¹ The review was conducted by Arthur Coleman and Scott Palmer of Nixon Peabody LLP, both former civil rights attorneys at the U.S. Department of Education. For the complete review, please see TAB 5.

provision of benefits, and the opportunities for further career advancement, education and training were considered in the creation of these categories.

Using longitudinal student data, ETS was then able to determine the high school course-taking patterns of students in each job category at age 26. Following are the findings:

- “Algebra II is the benchmark course for students aspiring to highly paid professional jobs or well-paid, white-collar jobs.”
- “Geometry is the benchmark course for students intending to work in well-paid, blue-collar jobs and low-paid/low-skilled jobs.”
- Four years of English that is at least at grade level is a benchmark requirement in the vast majority of jobs.

Following these analyses, the National Alliance of Business (NAB) and ETS, with the help of employers, educators and ADP staff, developed English language arts and mathematics benchmarks reflecting those curricula.²

NAB circulated these initial benchmarks among employers in the five partner states (and beyond). They gathered feedback from employers in the identified “high-performance” industries about the extent to which the expectations do or do not reflect their everyday needs. The industries included health care, gaming, high-tech manufacturing, semi-conductor technology, information technology, law, telecommunications, energy, television media, shipping and transportation, retail, and financial services.

Employers who have responded thus far also support the content of the preliminary benchmarks, particularly the ability of workers to think creatively and logically to identify and solve problems. They reiterate the value of students mastering Algebra I, Geometry, and Algebra II as much for their content as for their ability to keep students on a positive intellectual trajectory. They strongly support the emphasis on the development, analysis and presentation of arguments both orally and in writing.

Defining Postsecondary Expectations

Following the recommendations outlined in the legal brief, ADP state K-12 and postsecondary faculty examined the content of ADP state high school reading, writing and mathematics assessments, select postsecondary placement tests and national assessments such as the ACT and SAT.³ ADP then asked K-12 teachers and members of the postsecondary community in the partner states about their English language arts and mathematics expectations for high school graduates (related to postsecondary admissions and placement decisions), about their impressions of what is now required of high school students for graduation in their states, and about any gaps that may exist between those sets of expectations.⁴ A summary of the ADP’s **gap analysis** follows.

² The research was conducted by Anthony Carnevale and Donna Desrochers at Educational Testing Service. The ETS report provides a detailed accounting of its methodology and findings, and includes the preliminary ELA and mathematics benchmarks. For the complete report, please see TAB 6.

³ For the complete report, please see TAB 7.

⁴ For the complete report, please see TAB 8.